9200/2/22

TRANSMITTAL O	F FORMAL DRAV	WINGS	Docker HITACH	
In Re Application Of: YAMASHITA				
Application Filing Sate	Confirmation No.	Examiner	Customer No.	Group Art Unit
09/9/4,950 Rapertier 27, 2001	1777	HWANG, Joon H.	21,302	2122
Invention: METHOD AND SYSTEM	1 FOR MULTIDIMEN	NTIONAL DATABASE M	ANAGEMENT	
			DECENT	

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Transmitted herewith are:

22 sheets of formal drawing(s) for this application.

Each sheet of drawing indicates the identifying indicia suggested in 37 CFR Section 1.84(c).

Signature

Ken I. Yoshida Reg. No., 37,009

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215-599-0600

Dated: July 13, 2004

I certify that this document and attached formal drawings are being deposited on 7/2/64 with the U.S. Postal Service as first class mail/under 37 C.F.R. 1.8 and addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature of Person Mailing Correspondence

Iris C. Rousey

Typed or Printed Name of Person Mailing Correspondence



FIG.1

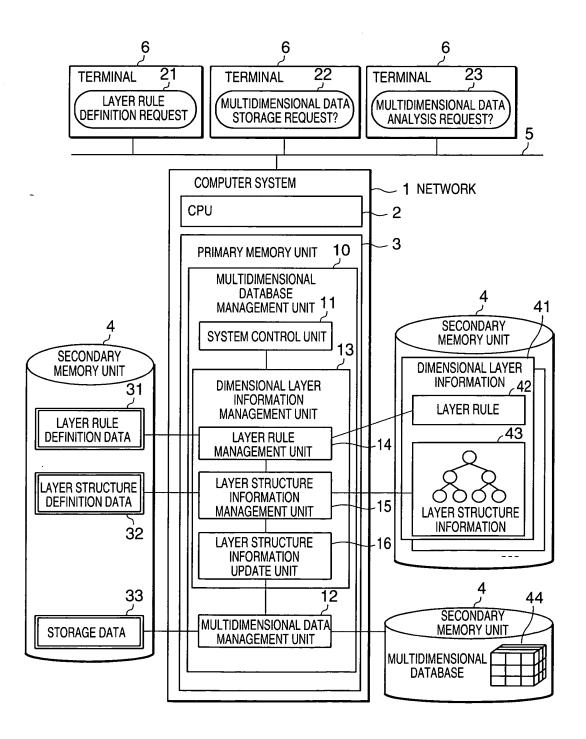




FIG.2

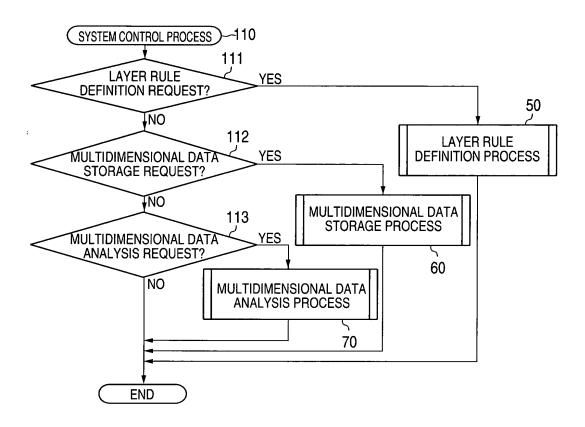


FIG.3

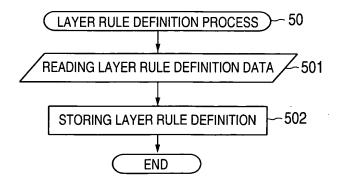




FIG.4

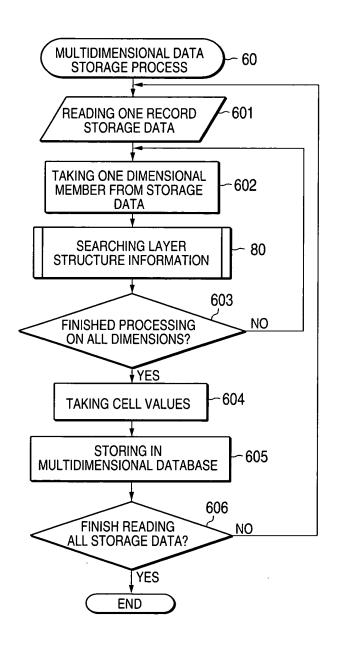




FIG.5

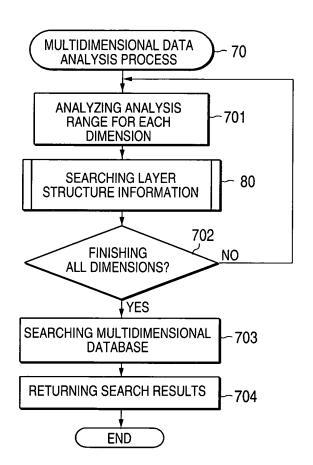




FIG.6

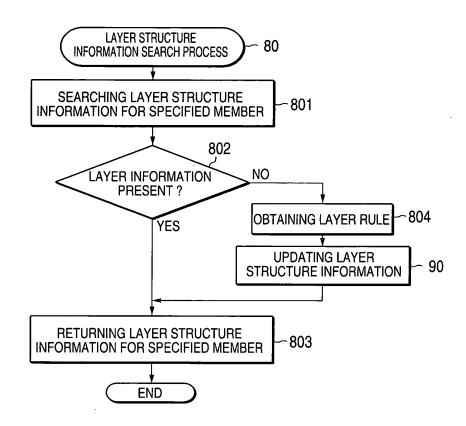
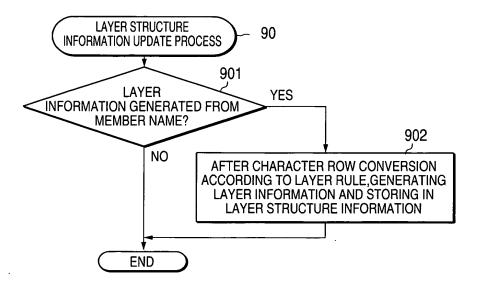


FIG.7



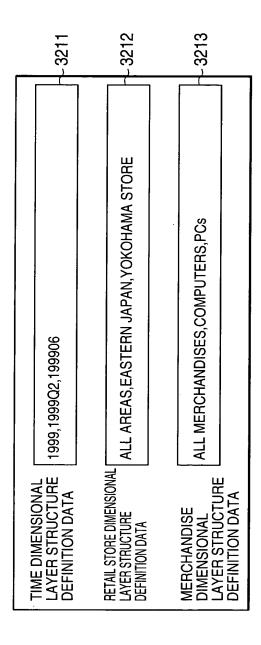


#LAYER RULE:
#AFTER CHARACTER ROW CONVERSION ON MEMBER, OBTAINING LAYER INFORMATION

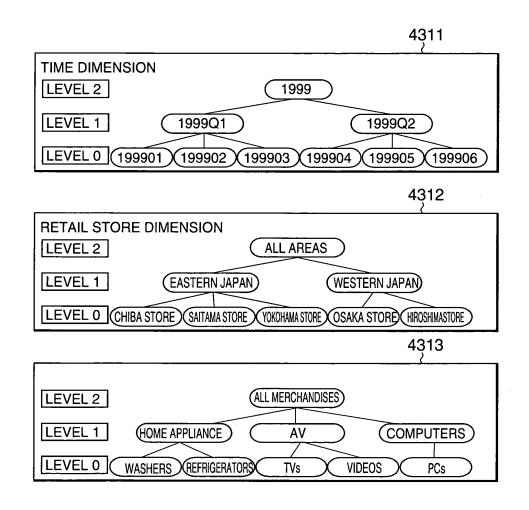
FROM MEMBER NAME
LEVEL10=\$ MEMBER NAME
LEVEL11={
 S/\(\frac{1}{2}\)...\\000789]/\1Q2/
 S/\(\frac{1}{2}\)...\\000789]/\1Q4/
]
LEVEL12={
 S/\(\text{(....}\))../\\1/
]



FIG 9









RETAIL STORE DIMENSIONAL LAYER RULE DEFINITION DATA

3120

#LAYER RULE:

#OBTAINING LAYER INFORMATION FROM CSV FORMATTED FILE

FROM FILE, CSV FILE1

LEVEL0=COLUMN 3

LEVEL1=COLUMN 2

LEVEL2=COLÙMN 1

FIG.12

3126

ALL AREAS, EASTERN JAPAN, CHIBA STORE
ALL AREAS, EASTERN JAPAN, SAITAMA STORE
ALL AREAS, EASTERN JAPAN, YOKOHAMA STORE
ALL AREAS, WESTERN JAPAN, OSAKA STORE
ALL AREAS, WESTERN JAPAN, HIROSHIMA STORE



FIG. 13

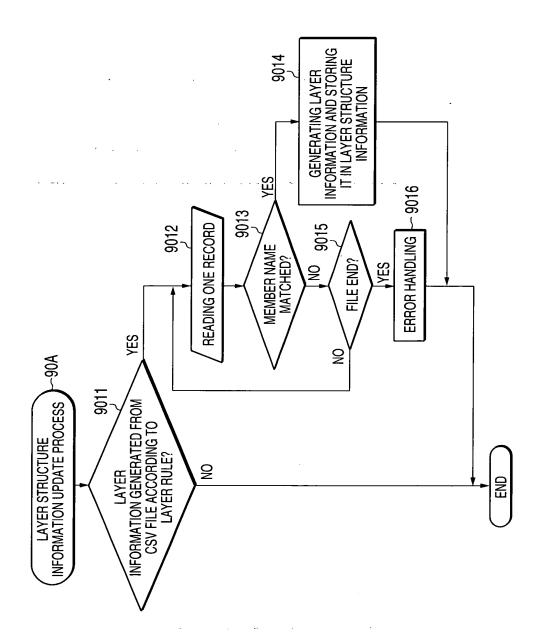
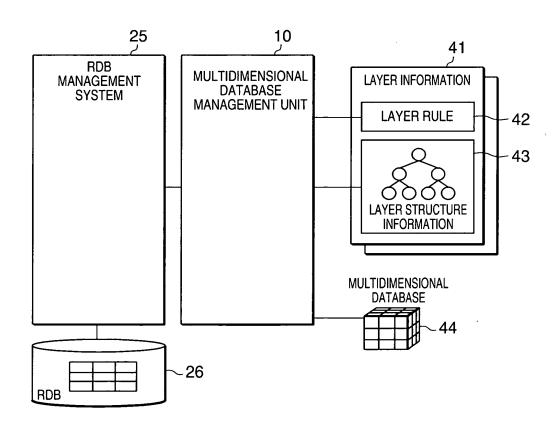




FIG.14





3130

MERCHANDISE DIMENSIONAL LAYER RULE DEFINITION DATA

#LAYER RULE: RDB TABLE 'PRODUCT MASTER TABLE'

#OBTAINING FROM COL1,COL2

FROM RDB TABLE 'PRODUCT MASTER TABLE'

LEVEL 0=SMALL CLASSIFICATION

LEVEL 1=LARGE CLASSIFICATION

LEVEL 2="ALL MERCHANDISE"

FIG.16

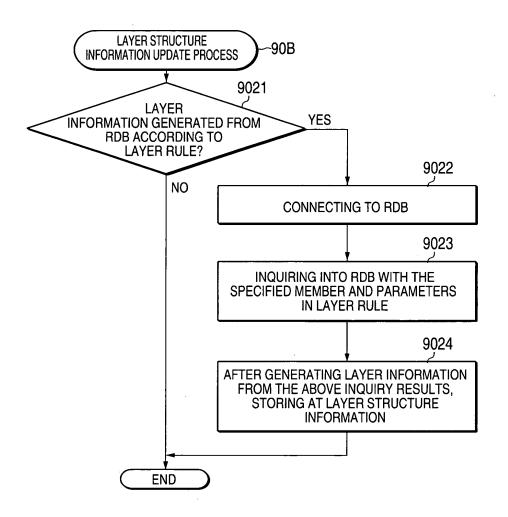
CONTENT OF RDB PRODUCT MASTER TABLE

LARGE CLASSIFICATION	SMALL CLASSIFICATION
HOME APPLIANCE HOME APPLIANCE AV AV COMPUTERS	WASHERS REFRIGERATORS TVs VIDEOS PCs

²⁶¹



FIG.17





4310 TIME DIMENSION (WITHOUT LAYER STRUCTURE INFORMATION) 4302 **RETAIL STORE DIMENSION** LEVEL 2 **ALL AREAS** WESTERN JAPAN) LEVEL 1 (EASTERN JAPAN) LEVEL 0 (CHIBA STORE) (SAITAMA STORE) OSAKA STORE (HIROSHIMASTORE) 4303 (ALL MERCHANDISES) LEVEL 2 LEVEL 1 (HOME APPLIANCE A۷ LEVEL 0 WASHERS REFRIGERATORS TVs **VIDEOS** 4304 UNIT DIMENSION(WITHOUT LAYER) LEVEL 0 (SALES UNIT) (SALES AMOUNT)



FIG.19

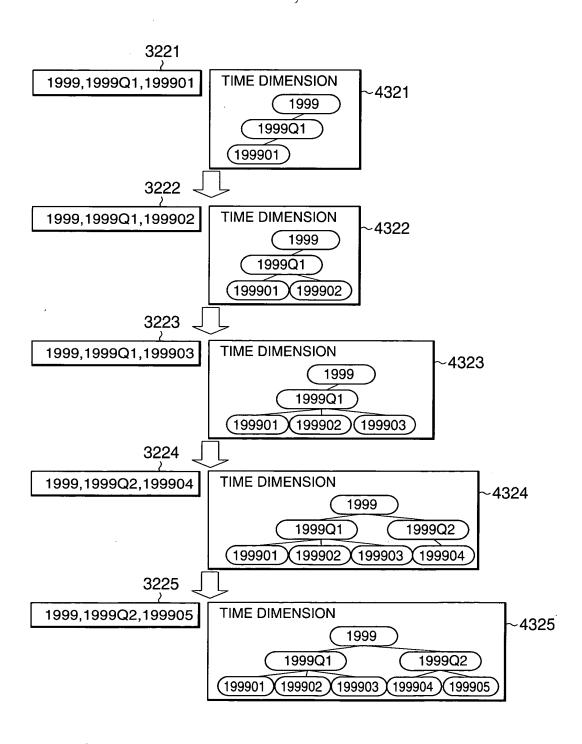




FIG.20 PRIOR ART

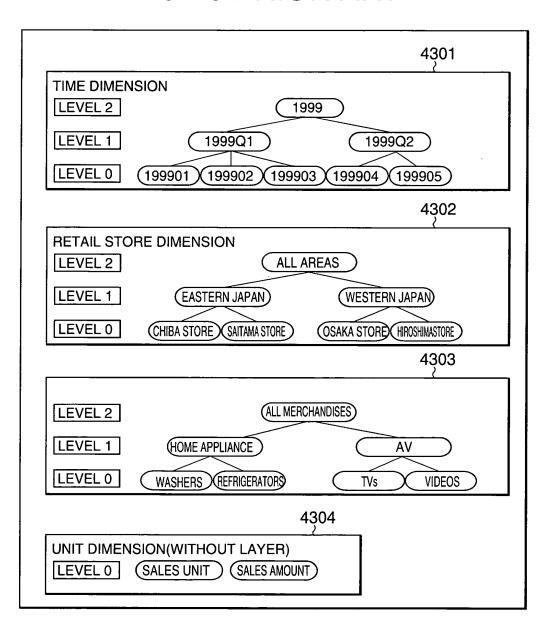




FIG.21 PRIOR ART

3201 TIME DIMENSIONAL 1999,1999Q1,199901 LAYER STRUCTURE 1999,1999Q1,199902 **DEFINITION DATA** 1999,1999Q1,199903 1999,1999Q2,199904 1999,1999Q2,199905 3202 RETAIL STORE ALL AREAS, EASTERN JAPAN, CHIBA STORE **DIMENSIONAL** ALL AREAS, EASTERN JAPAN, SAITAMA STORE LAYER STRUCTURE ALL AREAS, WESTERN JAPAN, OSAKA STORE DEFINITION DATA ALL AREAS, WESTERN JAPAN, HIROSHIMA STORE 3203 **MERCHANDISE** ALL MERCHANDISES, HOME APPLIANCE, **WASHERS** DIMENSIONAL ALL MERCHANDISES, HOME APPLIANCE, **REFRIGERATORS** LAYER STRUCTURE ALL MERCHANDISES, AV, TVs **DEFINITION DATA** ALL MERCHANDISES, AV, VIDEOS 3204 UNIT **DIMENSION** SALES UNIT LAYER STRUCTURE SALES AMOUNT **DEFINITION DATA**



FIG.22 PRIOR ART

3301

_					1	
	199901,	SAITAMA STORE,	TVs,	22,	2420000	
	199901,	OSAKA STORE,	REFRIGERATORS,	15,	1350000	
	199902,	HIROSHIMA STORE,	VIDEOS,	42,	2940000	
	199902,	SAITAMA STORE,	WASHERS,	21,	1680000	
	199903,	CHIBA STORE,	VIDEOS,	33,	2310000	
	199904,	HIROSHIMA STORE,	REFRIGERATORS,	18,	1620000	
	199905,	CHIBA STORE,	TVs,	45,	4950000	
		:				
		•				



FIG.23 PRIOR ART

MERCHANDISE DIMENSION	DIMENSION	S/LL						
UNIT DIMENSION	NC	SALES AMOUNT	JUNT					
TIME DIMENSION								1999
בימסדס יואדיזמ				1099901			1000001	
DIMENSION	199901	199902	199903	9	199904	199905	1	
CHIBA STORE	1100000	330000	270000	2200000	1100000	000099	1760000	3960000
SAITAMA STORE	000066	000066	000099	2640000	000099	000066	1650000	4290000
EASTERN JAPAN	2090000	1320000	1430000	4840000	1760000	1650000	3410000	8250000
OSAKA STORE	1100000	1100000	1100000	3300000	110000	000066	1100000	4400000
HIROSHIMA STORE	330000	550000	1100000	1980000	1100000	000099	1760000	3740000
WESTERN JAPAN	1430000	1650000	2200000	5280000	1210000	1650000	2880000	8140000
ALL AREAS	3520000	2970000	3630000	10120000	2970000	3300000	6270000	16390000
	7							



FIG.24 PRIOR ART

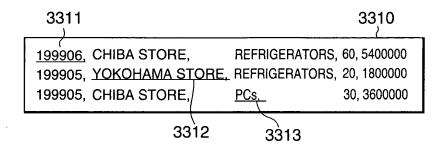
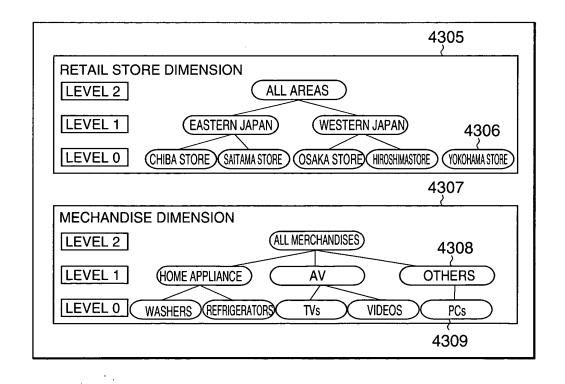


FIG.25 PRIOR ART





RETAIL STORE DIMENSION LAYER DEFINITION DATA **#MAIN LAYER RULE: #SEQUENTIALLY APPLYING SUBRULES** 3140 APPLYING SUBRULE STORE RULE1 APPLYING SUBRULE STORE RULE2 **#SUB LAYER RULE: STORE RULE1** #FROM CSV FILE, OBTAINING LAYER INFORMATION -3141 FROM FILE, CSV FILE1 LEVEL 0=COLUMN 3 LEVEL 1=COLUMN 2 LEVEL 2=COLUMN 1 **#SUB LAYER RULE:STORE RULE 2:** #AFTER CHARACTER ROW CONVERSION ON RETAIL STORE, OBTAINING LAYER INFORMATION FROM MEMBER NAME -3142 LEVEL 0= \$ MEMBER NAME LEVEL1={ S/\(.JAPAN\).\$/\1/ LEVEL 2={ **ALL SALES TERRITORIES**

FIG.27

199901, EASTERN JAPAN SAPPORO STORE, TVS,17, 1870000
199902, HIROSHIMA STORE, VIDEOS, 42, 2940000
199903, EASTERN JAPAN SAPPORO STORE, REFRIGERATOR,15,1350000



FIG.28

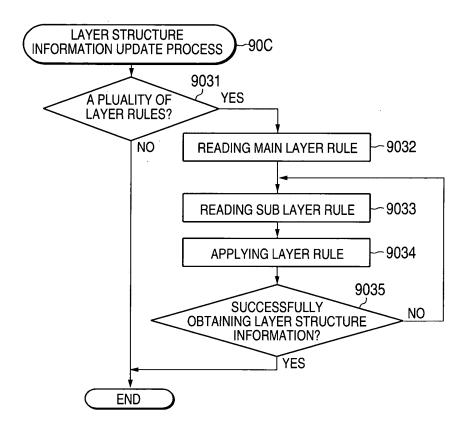


FIG.29

